

VATA

Anatomical Healthcare Models

Chester Chest™ Model 2400 User's Manual



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Thank You For Your Purchase!

***Thank you for your purchase of a Chester Chest™ Model 2400
with the New Advanced Arm 2386.***

Chester Chest™, an industry standard since 1987, enables physicians, nurses, home health staff, patients and support persons to develop competence with the most common types of vascular access devices. Within one realistic and portable training aid, is a great tool for teaching, training, competency testing and skills assessment. This is the most realistic and complete model for central lines offered anywhere! The area around all catheter sites can be used to practice cleansing, application of dressings and securement devices, fluid infusion and withdrawal.

Please read the entire User's Manual carefully before using the model to insure that you understand the proper care and use. This will also avoid situations that may not be covered by the warranty and help you enjoy the maximum benefit.

At **VATA** we understand that cost and useful life are important concerns when selecting teaching models. We are pleased to offer a refurbishing service to restore your Chester Chest™ to like-new condition. Please contact us for more details.

Contact Information

Whatever your question, problem, or comment, **VATA's** Customer Service is here to help. There are four quick, easy ways to contact us, so you can choose what works best for you. If there's anything we can do, just let us know!

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Overview of Chester Chest™ 2400 with the New Advanced Arm 2386

Chester Chest™ - with the New Advanced Arm (arm can be ordered separately to upgrade your existing Chester Chest™). The New Advanced Arm 2386 has a dual lumen 5FR PICC (Peripherally Inserted Central Catheter) exiting the basilic vein from the inner bicep area, which is currently the preferred site for placement. The basilic vein is slightly raised for easy identification. Posterior to the PICC insertion site is a recessed area for the placement of a peripheral port. (Optional port shown but not included - see part 0417 in Supplies and Accessories on page 12 to order). The base of the recessed area is made of soft material that permits the port to “float” when accessed. This area is covered with a removable tissue-like flap which, when placed over the port, provides the realistic feel of palpating and accessing. An additional feature of the new arm is a pre-positioned 20g IV catheter in the forearm. The New Advanced Arm has a greater degree of rotation and extension than our previous arm, just as you would experience on a patient when accessing the PICC or peripheral port. The dual PICC, IV catheter and optional peripheral port are all attached to a simulated blood reservoir bag in the arm to permit the practice of “blood” withdrawal and fluid infusion. Cleansing, application of dressings and securement devices can be demonstrated at all sites.

The left chest area of Chester Chest™ consists of:

- Chest Tissue Flap 0405 - A specially formulated material duplicates the feel of human tissue which, when placed over the chest port, provides a realistic practice of palpating and accessing, with proper access of the port being confirmed by a blood withdrawal – just like the real thing!
- A real implanted port under the Chest Tissue Flap
- A rigid underlying surface with molded ribs and a recessed area for the interchangeable inserts
- Difficult Accessing Inserts 0420, 0430 and 0440 which are made of a soft tissue-like material and placed either under or over the port to simulate palpating and accessing a port with one of the following types of placements: normal, “tipping”, “wandering” or “deeply placed”.

The right chest area of Chester Chest™ has a 9.6FR tunneled central catheter that is visible up to the clavicle. The Dacron cuff is also discernable. The external jugular vein is slightly raised with an opening for you to attach your own catheter and there is also an opening in the chest for the placement of a subclavian catheter.

These catheters are available from **VATA** – see Supplies and Accessories section page 12. If you would prefer, you can send us the catheters your institution uses and we can install them for you. Chester Chest™ can be used in either an upright or supine position.

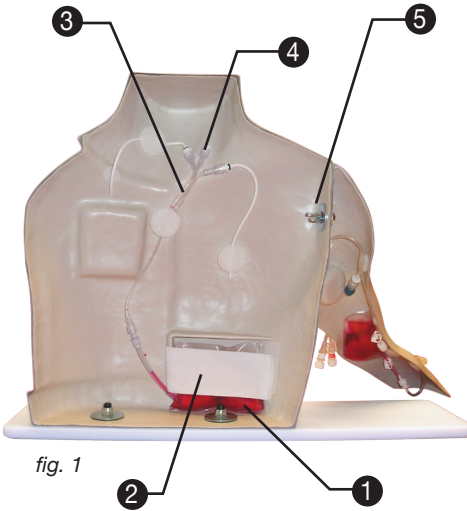


fig. 1

- 1 0451 Simulated Blood Reservoir Bag for Torso
- 2 Retention Strap for Simulated Blood Reservoir Bag
- 3 0450 Three Way Parallel Tubing Set for Torso
- 4 Extra Connection for Use with Optional Subclavian or Jugular Catheter
- 5 0455 Bolt and Wing Nut to Attach Arm to Torso

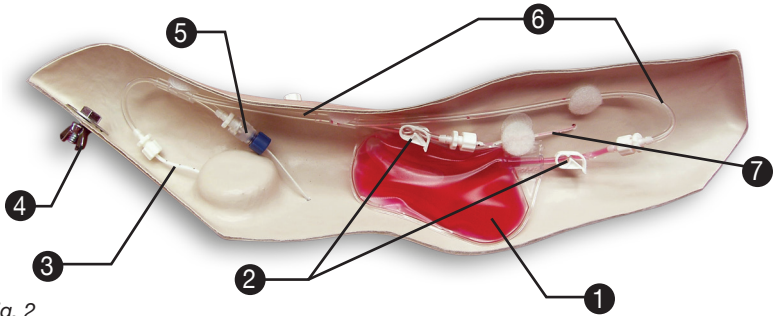
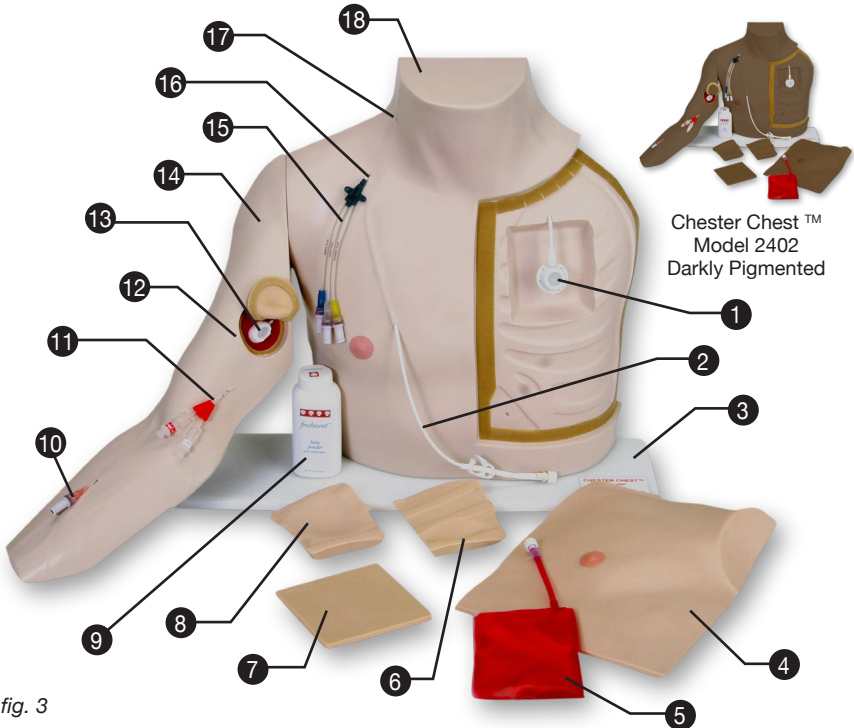


fig. 2

- 1 0453 Simulated Blood Reservoir Bag for Arm
- 2 Snap Clamps
- 3 0417 Optional Peripheral Port (See Supplies and Accessories on p.12 to order)
- 4 0455 Bolt and Wing Nut to Attach Arm to Torso
- 5 Dual PICC Attachment to Tubing Set
- 6 0446 Tubing Set for Adv. Arm
- 7 20G IV Catheter Attachment to Tubing Set

Chester Chest™ Model 2400

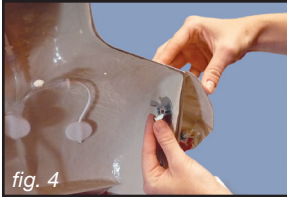


Chester Chest™
Model 2402
Darkly Pigmented

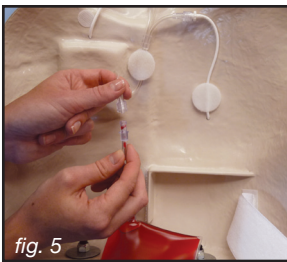
fig. 3

- | | |
|--|---|
| ① 0406 Real Port (IVAD) | ⑪ 0408 Dual Lumen PICC 5FR |
| ② 0407 Tunneled Central Catheter 9.6FR | ⑫ Recessed Area for Optional Peripheral Port |
| ③ Base | ⑬ 0417 Optional Peripheral Port Shown; see Supplies and Accessories on p.12 to Order |
| ④ 0405 Outer Tissue Flap | ⑭ New Advanced Arm |
| ⑤ 0451 Simulated Blood Reservoir Bag for Torso | ⑮ 0410 Optional Triple Lumen Catheter Shown; see Supplies and Accessories on p.12 to Order |
| ⑥ 0430 Difficult Accessing Insert simulates “tipping” port | ⑯ Opening for Optional Subclavian Catheter |
| ⑦ 0440 Difficult Accessing Insert simulates a deeply placed port | ⑰ Opening for Optional Jugular Catheter |
| ⑧ 0420 Difficult Accessing Insert simulates a “wandering” port | ⑱ Torso |
| ⑨ 0458 Talc-Cornstarch | |
| ⑩ IV Catheter 20G | |

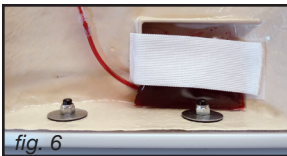
Setting up your Chester Chest™ 2400 for use



Unwrap the arm and body. Set the bag of additional parts, packed with the torso, aside for use later. Place the torso on a flat surface in an upright position. Remove the wing nut from the arm, keeping the bolt in place, and align the bolt with the hole in the right shoulder; insert and reattach the wing nut (see fig. 4).



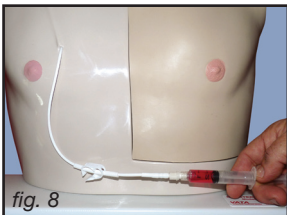
If you are going to use injection caps or needleless access caps, attach before attaching the simulated blood reservoir bag. On the backside of the torso, locate the simulated blood reservoir bag and remove from torso. Carefully remove the white cap on the simulated blood reservoir bag, taking care not to let the liquid leak out and attach the female leuc fitting to the male leuc fitting on the bottom of the triple parallel tubing (see fig. 5).



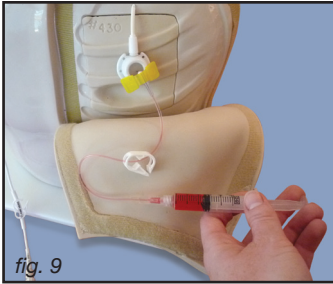
Replace the reservoir bag behind the white retention strap, making sure that the tubing attached to the bag is positioned exiting the bag from the bottom (see fig. 6).



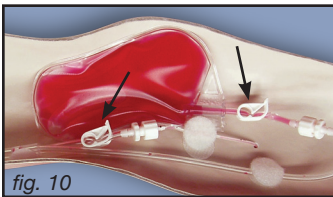
Do not position reservoir bag with tubing exiting from the top as you will withdraw air (see fig. 7).



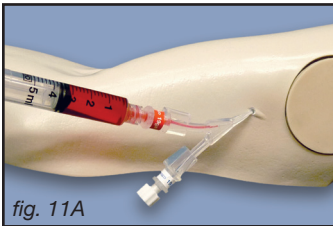
To prime the tubing with simulated blood attach a syringe to the tunneled central venous catheter and drawback to remove all the air in the line. Be sure the snap clamp is open on the catheter. This procedure may need to be repeated depending on the size of your syringe. You are done when the simulated blood is visible in the syringe (see fig. 8).



Then remove the Chest Tissue Flap on the left side of the chest (*do not place on printed papers as this can stain the tissue flap*), attach a Huber needle to a syringe and access the port. Repeat the procedure used to prime the tunneled central venous catheter, until simulated blood is visible in the syringe (*see fig. 9*). If you have ordered your model with optional subclavian or jugular catheters, prime using steps for tunneled central catheters (*see fig. 9*).



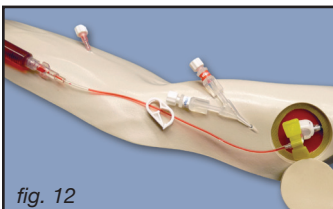
The torso is now primed and ready for use. Please note that one of the three parallel tubing sets is not used and has a cap attached to the male leuc connector. This tubing set is provided should you wish to add a subclavian or jugular catheter (*purchase of a special connector may be needed for some catheters*).



To prime the arm tubing, attach injection caps or needless access devices on the IV catheters and dual lumen PICC before attaching the simulated blood reservoir bag. On the backside of the arm, open all snap clamps (*see fig. 10*).



Attach a syringe to each side of the dual lumen PICC and withdraw air, until simulated blood is visible in the syringe. This procedure may need to be repeated, depending on the size of your syringe. Repeat this procedure with the IV catheter (*see fig. 11A & 11B*). If you have ordered your arm with the **optional** peripheral port, attach a Huber needle to a syringe, access the port and withdraw air until simulated blood is visible in the syringe (*see fig. 12*). The arm is now primed and ready for use.



Proper Use of your Chester Chest™

Chest Tissue Flap - 0405

When removing the Chest Tissue Flap, always pull gently from the edge to prevent damage to the flap. Due to the elasticity of the Chest Tissue Flap, it may be easier to attach when Chester Chest™ is in a supine position. In order to ensure a realistic feel when palpating the port (IVAD), the Chest Tissue Flap is formulated to be soft to the touch. As the material is soft, care must be taken to maximize the useful life. There are three areas that should be avoided, as all can cause premature tearing of the Chest Tissue Flap:



fig. 13

Do not pull the Chest Tissue Flap back to view the placement of the needle in the port septum (see fig. 13).

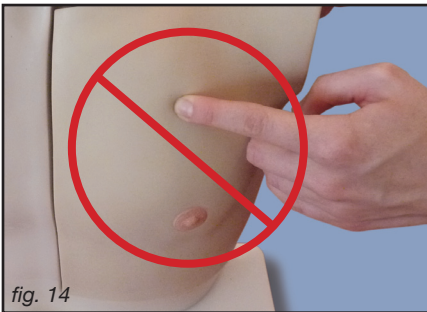


fig. 14

Do not press fingernails into the tissue flap when palpating the port (see fig. 14).

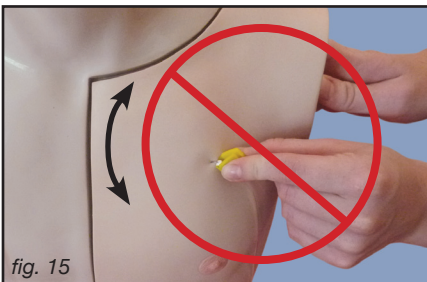
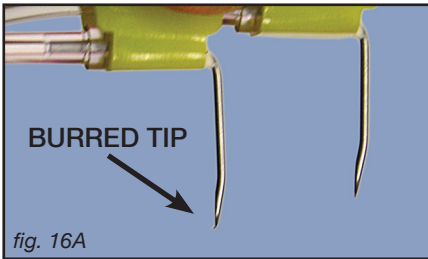
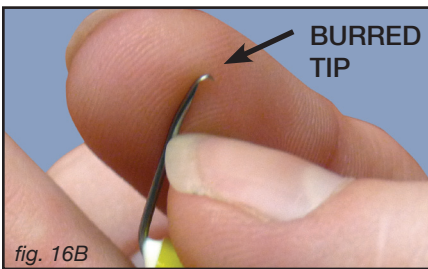


fig. 15

Do not “rock” the access needle back and forth to confirm placement (see fig. 15).



When accessing through the flap, a 22g Huber-type needle is best. Be sure to check the needle tip periodically for burrs. Use of burred needles will reduce the life of the tissue flap and the port septum. In some cases pulling a burred Huber-type needle between the fingernails will straighten out a burr and permit the re-use of that needle (see fig. 16A & 16B).



Should you need additional Huber practice needles you can order:

5025 3/4" 20G right angle Huber needle
8" extension set 1 dozen.

5026 1" 20G right angle Huber needle
8" extension set 1 dozen.



The entire area of the tissue flap can be used for accessing. Just move the port to the desired location and place the Chest Tissue Flap over it (see fig. 17). See text under **Difficult Accessing Insert 0430** to learn how to extend catheter length to move port (see fig. 21).



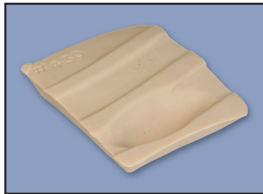
Cleaning of the Chest Tissue Flap or Difficult Accessing Inserts is best done by wiping with an alcohol-wetted, non-linting cloth. The part should be permitted to air dry and then powdered with the cornstarch talc supplied. Any excess talc can be removed with a dry cloth. If at any time the skin flap becomes tacky to the touch, talc should be applied (see fig. 18).

Difficult Accessing Inserts

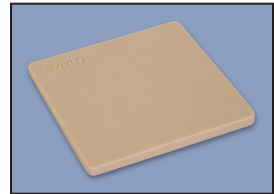
The model is supplied with three different Difficult Accessing Inserts. These are used alone or in conjunction to simulate various difficult accessing scenarios. All the inserts have the part numbers on them for easy identification.



0420 Difficult accessing insert simulates a “wandering” port



0430 Difficult accessing insert simulates “tipping” port



0440 Difficult accessing insert simulates a deeply placed port



DIFFICULT ACCESSING INSERT 0420 for simulation of a “wandering” or “floating” port. Remove the 0430 insert and replace with the 0420. The #420 should be located in the upper left hand corner. For best results in simulating a wandering or floating port, place a small amount of K-Y or other lubricating jelly under and on top of your port. This will vary by the type of port used (see fig. 19). Place the port in the center of the depressed area and reattach the Chest Tissue Flap. When you palpate the port, it will move around.



fig. 20A



fig. 20B

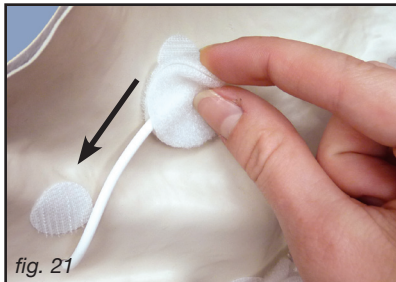


fig. 21



fig. 22

DIFFICULT ACCESSING INSERT 0430 for simulation of a normal or “tipping” port. This insert is in place, under the port, when you receive your model. The #430 should be located in the upper left side of the insert, as you look at the model (see fig. 20A). The port can be placed on the upper portion of the insert to simulate a normal placement for accessing (see fig. 20A). The lower portion of this insert has a recessed area, where the port can be placed to simulate a “tipped” port (see fig. 20B). This will vary with the type of port used.

If you find you need additional catheter length to place the port in this area, look on the backside of the torso where the port catheter comes through from the front side. There is Velcro on the catheter tubing to secure the catheter to the torso. By pulling the Velcro off the upper placement and moving it to the lower attachment position, you will get an additional length of tubing (see fig. 21).

DIFFICULT ACCESSING INSERT 0440 for simulation of a “deeply placed” port. The #440 will be located in one of the corners. This piece is placed over the top of the port, with the Chest Tissue Flap then placed over the 0440. Best results using the 0440 insert are experienced when the 0420 insert is used in the recessed area under the port (see fig. 22).

Chester Chest™ Refurbishing Service

The purchase of training models is a significant financial investment. Realizing this, **VATA** is proud to offer a refurbishing service, to bring your model to new condition. Please call for instructions on how to return your model. Once your model is received, it will be evaluated and you will be contacted with the items and cost to refurbish for your approval, before any work is done. Turn-around time, to complete a refurbishing, is less than a week.

All parts on this model are available individually.

Product # Description

- 2400** *Chester Chest™ with New Advanced Arm*
Size 20.5" x 15.5" x 5.25" shipping wt. 10 lbs.
See pages 3-5 for an overview of included parts
- 2402** *Chester Chest™ with New Advanced Arm Darkly Pigmented Skin*
Same as 2400 above, but with darkly pigmented skin.

Supplies & Accessories *Please call for current prices.*

- 0401** **Optional** Carrying Case for Chester Chest – Sturdy padded fabric with carrying handles and sleeve for protection of detachable arm. Shipping wt. 4 lbs.
- 0404** Chest Tissue Flap Replacement, darkly pigmented for 2402
- 0405** Chest Tissue Flap Replacement for 2400
- 0406** Practice Port (IVAD)
- 0407** Tunneled Central Venous Catheter 9FR (CVC)
- 0408** Dual PICC Catheter 5 FR (requires part 0418 for attachment)
- 0409** **Optional** Tunneled Dual Lumen Catheter 9.6FR (requires part 0454 for attachment)
- 0410** **Optional** Triple Lumen Catheter (requires part 0454 for attachment)
- 0417** **Optional** Peripheral Arm Port (for New Advanced Arm)
- 0418** 6 FR Universal Catheter Connector
- 0446** Clear Tubing for New Advanced Arm
- 0450** Three-way Parallel Tubing Set
- 0451** Simulated Blood Reservoir Bag for Chester torso
- 0453** Simulated Blood Reservoir Bag for Chester arm
- 0454** 9.6 FR Universal Catheter Connector
- 2386** Replacement New Advanced Arm for Chester
- 2387** Replacement New Advanced Arm for Chester, Darkly Pigmented
- 1491** Simulated Blood, One Quart - New, Stain Resistant
- 1494** Simulated Blood, One Gallon - New, Stain Resistant
- 5025** ¾" 20G right angle Huber needle (set of 1 dozen)
- 5026** 1" 20G right angle Huber needle (set of 1 dozen)

